

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2004.

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA			
FARM SIZE..... 500 ACRES			
IRRIGATION TYPE..... SPRINKLER			
NUMBER OF CROPS..... 6			
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	57.00	42	2,394
ALFALFA	285.00	48	13,680
BARLEY	8.50	28	238
ARP	0.00		
FLEX IN PICKER COTTON	1.50	28	42
OAT HAY	8.00	28	224
PICKER COTTON	59.50	28	1,666
ARP	0.00		
FLEX IN PICKER COTTON	10.50	28	294
STRIPPER COTTON	59.50	28	1,666
ARP	0.00		
FLEX IN PICKER COTTON	10.50	28	294
TOTAL	500.00		20,498
ACRE FEE PER ACRE OF WATER RIGHTS			3.42

TABLE 2. Basic cost information for the Artesia-Lake Arthur area, Projected 2004.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.30
General & Irrigators	\$/hour		\$6.70
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.29
Phosphate (P ₂ O ₅)	\$/pound		\$0.20
Seed:			
Alfalfa	\$/pound		\$2.80
Cotton picker	\$/pound		\$0.68
stripper	\$/pound		\$0.68
Oats	\$/pound		\$0.30
Barley	\$/pound		\$0.25
Wire:	\$/lb.		\$0.38
Natural gas	\$/MCF		\$7.22
(service charge)	\$/month		\$10.00
Diesel fuel	\$/gallon		\$1.50
Gasoline	\$/gallon		\$1.45
Electricity	cents/KwHr		3.64
LP Gas	\$/gallon		\$0.86
Employee Liability Insurance	\$/1,000 wages		\$20.00
Employee Benefits	percent/wages		18.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		8.00%
Land Interest Rate	percent		7.00%
Equipment Interest Rate	percent		8.00%
Real Interest Rate	percent		4.00%
Land Taxes	\$217.50 /acre (full value)		\$1.75
Personal Property Tax Rate - NR	\$/1,000 (Assessed Value)		\$24.18
- R			\$20.02
Supervision Factors			
Field Crop-Irrigation	\$/labor hour		\$1.00
Field Crop-Equipment & General	\$/labor hour		\$0.50
Vegetable Crop-Irrigation	\$/labor hour		\$2.90
Vegetable Crop-Equip. & General	\$/labor hour		\$1.00
Management Rate			
Field Crops	percent/GR		7.00%
Vegetable Crops	percent/TOE		10.00%

TABLE 3. Overhead cost information for the Artesia-Lake Arthur area, Projected 2004.

Item			
Electricity (Domestic & Shop)	\$220.00	per month	\$2,640.00
Telephone	\$120.00	per month	\$1,440.00
Accounting & Legal			\$1,520.00
Misc. Supplies & Hand Tools			\$2,230.00
Pickup and Auto	miles	20,000 @ \$0.360 per mile	\$7,200.00
Insurance			
- general liability (non-employee)			\$164.80
- fire/theft			\$1,400.00
Property Taxes			
- non-planted land			\$0.00
- other than land & machinery			\$630.00
Building repairs and maintenance			\$1,385.00
Dues, fees, publications			\$410.00
Farmstead Equipment			\$175.00
Total			\$19,194.80
Total Per Planted Acre			\$43.33

TABLE 4. Pumping costs and data for irrigation wells, Artesia-Lake Arthur area
Projected 2004.

INPUT DATA			
DELIVERY PSI:		DEPTH CHARACTERISTICS:	
SPRINKLER HEAD.....	40	STATIC.....	60
		DRAW DOWN.....	20
		TOTAL HEAD.....	80
		CASING.....	250
GALLONS PER MINUTE (GPM)	500	GALLONS PER MINUTE (GPM)	500
WORK HORSEPOWER.	10	WORK HORSEPOWER	6
EFFICIENCY FACTOR:		EFFICIENCY FACTOR:	
ELECTRICITY	0.47	ELECTRICITY	0.47
NATURAL GAS	0.12	NATURAL GAS	0.12
LP GAS	0.12	LP GAS	0.12
DIESEL	0.16	DIESEL	0.16
FUEL COST PER UNIT:		FUEL COST PER HOUR:	
ELECTRICITY	3.64 Cents/KwHr	ELECTRICITY	3.64 Cents/KwHr
NATURAL GAS	\$7.22 \$/MCF	NATURAL GAS	\$7.22 \$/MCF
LP GAS	\$0.86 \$/GAL	LP GAS	\$0.86 \$/GAL
DIESEL	\$1.50 \$/GAL	DIESEL	\$1.50 \$/GAL
TOTAL FUEL COSTS:		TOTAL FUEL COSTS (BOOSTER PUMP):	
ELECTRIC WELL:		ELECTRIC:	
COST PER HOUR	\$0.61	COST PER HOUR	\$0.38
COST PER ACRE INCH	\$0.56	COST PER ACRE INCH	\$0.34
NATURAL GAS WELL:		NATURAL GAS:	
COST PER HOUR	\$1.73	COST PER HOUR	\$1.03
COST PER ACRE INCH	\$1.56	COST PER ACRE INCH	\$0.93
LP GAS WELL:		LP GAS:	
COST PER HOUR	\$2.03	COST PER HOUR	\$1.21
COST PER ACRE INCH	\$1.84	COST PER ACRE INCH	\$1.10
DIESEL WELL:		DIESEL:	
COST PER HOUR	\$1.72	COST PER HOUR	\$1.03
COST PER ACRE INCH	\$1.56	COST PER ACRE INCH	\$0.93

TABLE 5. Equipment summary for a 500 acre sprinkler-irrigated farm with above average management, Artesia-Lake Arthur are:
Projected 2004.

EQUIPMENT	ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		
					FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR	40 HP	74	1	\$1,600	\$321	\$15	\$4.34	\$0.21	\$50	\$10	\$0.81
TRACTOR	65 HP	245	1	\$2,400	\$1,731	\$275	\$7.05	\$1.12	\$138	\$22	\$0.65
TRACTOR	70 HP	169	1	\$4,840	\$940	\$294	\$5.54	\$1.73	\$705	\$85	\$4.66
TRACTOR	96 HP	356	1	\$26,855	\$3,797	\$2,227	\$10.66	\$6.25	\$1,930	\$233	\$6.07
TRACTOR	145 HP	310	1	\$31,475	\$4,198	\$1,774	\$13.55	\$5.72	\$4,652	\$281	\$15.92
COTTON PICKER	4 ROW	61	1	\$56,120	\$550	\$2,610	\$9.07	\$43.01	\$9,350	\$754	\$166.51
COTTON STRIPPER MTD		37	1	\$2,950	\$110	\$2.99			\$767	\$46	\$22.04
SWATHER	16 FT	177	1	\$21,350	\$993	\$1,665	\$5.62	\$9.41	\$3,621	\$292	\$22.12
BALE WAGON S.P.		321	1	\$9,890	\$3,606	\$7,159	\$11.24	\$22.32	\$2,250	\$181	\$7.58
BALER PTO		401	2	\$7,800	\$1,169	\$2.92			\$1,100	\$89	\$2.96
PLANTER	4 ROW	37	1	\$3,400	\$200	\$5.44			\$680	\$27	\$19.23
CULTIVATOR	4 ROW	119	1	\$1,500	\$100	\$0.84			\$200	\$12	\$1.78
DISC	12 FT	107	1	\$2,250	\$137	\$1.28			\$300	\$18	\$2.98
DRILL	12 FT	27	1	\$2,200	\$86	\$3.12			\$440	\$18	\$16.70
PLANE	14 FT	32	1	\$2,750	\$18	\$0.55			\$367	\$22	\$11.97
FLOAT	14 FT	50	1	\$600	\$7	\$0.14			\$60	\$4	\$1.27
PLOW (MOLDBOARD)	4-16 IN	103	1	\$4,000	\$235	\$2.28			\$533	\$32	\$5.48
SHREDDER	4 ROW	20	1	\$2,500	\$23	\$1.15			\$333	\$20	\$17.84
COTTON TRAILER		127	5	\$6,000	\$27	\$0.22			\$800	\$48	\$6.70
RAKE	8 FT	74	1	\$3,400	\$232	\$3.13			\$340	\$27	\$4.96
SLED		21	1	\$375	\$6	\$0.29			\$50	\$3	\$2.50
NATURAL GAS BOOSTER PUMP		18,553	3	\$7,500	\$3,469	\$1.03			\$1,000	\$60	\$0.06
SIDE-ROLL SPRINKLER		18,553	13	\$32,500	\$872	\$0.05			\$4,333	\$262	\$0.25
NATURAL GAS WELL		18,553	11	\$121,000	\$32,017	\$3,711	\$1.73	\$0.20	\$11,000	\$975	\$0.72
				\$355,255	\$67,315	\$26,421			\$44,998	\$3,524	

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area
Projected 2004.
Planting dates: March 15 - April 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$120.00	4.50 TONS (STACKED)						\$540.00
TOTAL							\$540.00	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$2.80	20 LBS	\$56.00					\$56.00
FERTILIZER (16-20-0)	\$0.17	200 LBS	\$34.00					\$34.00
HERBICIDE	\$31.77	1 ACRE	\$31.77					\$31.77
PUMP WATER*		42 AC. IN.						
SUBTOTAL			\$121.77					\$121.77
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.24	\$2.30	\$1.19	\$3.21	\$7.95
PLOW	145 HP	0.48 HR		\$3.50	\$6.50	\$3.84	\$10.27	\$24.12
FLOAT	70 HP	0.16 HR		\$1.17	\$0.89	\$0.30	\$0.95	\$3.31
PLANE (3X)	145 HP	0.57 HR		\$4.16	\$7.72	\$3.58	\$15.90	\$31.35
DISC (2X)	145 HP	0.34 HR		\$2.48	\$4.61	\$2.38	\$6.42	\$15.89
FLOAT (2X)	70 HP	0.32 HR		\$2.34	\$1.77	\$0.60	\$1.90	\$6.61
DRILL (2X)	70 HP	0.42 HR		\$3.07	\$2.33	\$2.04	\$8.97	\$16.41
IRRIGATE (6X)		1.50 HR		\$10.05	\$104.86	\$16.50	\$38.83	\$170.24
SUBTOTAL		3.96 HR		\$28.01	\$130.98	\$30.43	\$86.46	\$275.88
HARVEST OPERATIONS								
SWATHER (3X)	16 FT	0.33 HR		\$2.41	\$1.85	\$3.11	\$7.30	\$14.67
RAKE	40 HP	0.05 HR		\$0.37	\$0.22	\$0.17	\$0.29	\$1.04
BALER (3X)	145 HP	0.75 HR		\$5.48	\$10.16	\$6.48	\$14.16	\$36.28
BALEWAGON (3X)	SP	0.60 HR		\$4.38	\$6.74	\$13.39	\$4.55	\$29.06
SUBTOTAL		1.73 HR		\$12.63	\$18.97	\$23.14	\$26.30	\$81.04
OVERHEAD EXPENSES								
DOWNTIME		1.05 HR		\$7.65				\$7.65
EMPLOYEE BENEFITS				\$7.31				\$7.31
INSURANCE				\$0.81				\$0.81
SUPERVISION AND MANAGEMENT				\$41.40				\$41.40
SUBTOTAL		1.05 HR		\$0.81	\$56.36			\$57.17
TOTAL OPERATING EXPENSES		6.74 HR		\$122.58	\$96.99	\$149.96	\$53.57	\$535.86
NET OPERATING PROFIT							\$4.14	
INTEREST ON EQUIPMENT INVESTMENT							\$47.02	
RETURN TO LAND AND RISK							(\$42.88)	

BUDGET SUMMARY

GROSS RETURN	\$540.00	
VARIABLE OPERATING EXPENSES	\$326.11	
RETURN OVER VARIABLE EXPENSES	\$213.89	(GROSS MARGIN)
FIXED EXPENSES	\$112.75	
NET FARM INCOME	\$101.13	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$96.99	
NET OPERATING PROFIT	\$4.14	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$47.02	
RETURN TO LAND AND RISK	(\$42.88)	

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area
 Projected 2004.
 Harvesting Dates: May 5 - November 1

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$140.00	7.00 TONS (STACKED)	\$980.00
GRAZING	\$40.00		\$40.00
TOTAL			\$1,020.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
INSECTICIDE (CUSTOM)	\$34.60	2 X/ACRE	\$69.20		\$69.20
HERBICIDE (CUSTOM)	\$40.92	1 X/ACRE	\$40.92		\$40.92
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25		\$5.25
FERTILIZER (5-26-30)	\$0.19	200 LBS	\$38.00		\$38.00
WIRE	\$0.38	60 LBS	\$22.95		\$22.95
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$57.79		\$57.79
ESTABLISHMENT: Principal		5 YEARS		\$8.58	\$8.58
: Interest				\$52.95	\$52.95
PUMP WATER*		48 AC. IN.			
SUBTOTAL			\$234.11	\$61.53	\$295.64

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (6X)		1.50 HR		\$10.05	\$119.84	\$18.86	\$44.38	\$193.13
SUBTOTAL		1.50 HR		\$10.05	\$119.84	\$18.86	\$44.38	\$193.13

HARVEST OPERATIONS								
SWATHER (5X)	16 FT SP	0.55 HR		\$4.02	\$3.09	\$5.18	\$12.17	\$24.45
RAKE (5X)	40 HP	0.25 HR		\$1.83	\$1.08	\$0.83	\$1.44	\$5.19
BALER (5X)	96 HP	1.25 HR		\$9.13	\$13.32	\$11.46	\$11.29	\$45.20
BALE WAGON (5X)	SP	1.00 HR		\$7.30	\$11.24	\$22.32	\$7.58	\$48.44
SUBTOTAL		3.05 HR		\$22.27	\$28.74	\$39.79	\$32.48	\$123.27

OVERHEAD EXPENSES								
DOWNTIME		0.70 HR		\$5.11				\$5.11
EMPLOYEE BENEFITS				\$5.82				\$5.82
INSURANCE			\$0.65					\$0.65
LAND TAXES							\$1.75	\$1.75
SUPERVISION AND MANAGEMENT				\$74.43				\$74.43
OTHER EXPENSES			\$43.33					\$43.33
SUBTOTAL		0.70 HR		\$43.98	\$85.35		\$1.75	\$131.08

TOTAL OPERATING EXPENSES		5.25 HR		\$278.08	\$117.67	\$148.58	\$58.64	\$140.14	\$743.11
NET OPERATING PROFIT									\$276.89
INTEREST ON OPERATING CAPITAL			(\$157.44 @ 8.00%)						\$12.60
INTEREST ON EQUIPMENT INVESTMENT									\$28.37
RETURN TO LAND AND RISK									\$235.92

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$1,020.00	
VARIABLE OPERATING EXPENSES	\$485.30		
RETURN OVER VARIABLE EXPENSES		\$534.70	(GROSS MARGIN)
FIXED EXPENSES	\$140.14		
NET FARM INCOME		\$394.55	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$117.67		
NET OPERATING PROFIT		\$276.89	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.96		
RETURN TO LAND AND RISK		\$235.92	

TABLE 8. Barley, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area
 Projected 2004.
 Planting dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD		TOTAL
GROSS RETURNS				
BARLEY	\$3.50	45.00 CWT		\$157.50
DIRECT PAYMENT	\$0.24	45.00 CWT	0.85	\$9.18
COUNTER CYCLICAL PAYMENT	\$0.00	45.00 CWT	0.85	\$0.00
GRAZING	\$40.00			\$40.00
TOTAL				\$206.68

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.25	110 LBS	\$27.50		\$27.50
NITROGEN (N)	\$0.29	150 LBS	\$43.50		\$43.50
INSECTICIDE (CUSTOM)	\$20.01	1 X/ACRE	\$20.01		\$20.01
PUMP WATER*		28 AC. IN.			
CROP INSURANCE	\$5.88		\$5.88		\$5.88
SUBTOTAL			\$96.89		\$96.89

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.50	\$6.50	\$3.84	\$10.27	\$24.12
DISC (2X)	145 HP	0.34 HR		\$2.48	\$4.61	\$2.38	\$6.42	\$15.89
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		\$1.53	\$1.16	\$1.02	\$4.49	\$8.20
IRRIGATE (4X)		1.00 HR		\$6.70	\$69.91	\$11.00	\$25.89	\$113.49
SUBTOTAL		2.03 HR		\$14.22	\$82.18	\$18.24	\$47.07	\$161.71

HARVEST OPERATIONS								
COMBINE (CUSTOM)			\$19.81					\$19.81
HAUL (CUSTOM)			\$9.00					\$9.00
SUBTOTAL			\$28.81					\$28.81

OVERHEAD EXPENSES								
DOWNTIME		0.26 HR		\$1.88				\$1.88
EMPLOYEE BENEFITS				\$2.56				\$2.56
INSURANCE			\$0.28					\$0.28
LAND TAXES						\$1.75		\$1.75
SUPERVISION AND MANAGEMENT				\$15.98				\$15.98
OTHER EXPENSES			\$43.33					\$43.33
SUBTOTAL		0.26 HR	\$43.61	\$20.42			\$1.75	\$65.79

TOTAL OPERATING EXPENSES		2.29 HR	\$169.31	\$34.64	\$82.18	\$18.24	\$48.82	\$353.20
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NET OPERATING PROFIT (\$146.52)

INTEREST ON OPERATING CAPITAL	(\$75.95	@	8.00%)			\$6.08
INTEREST ON EQUIPMENT INVESTMENT								\$13.59

RETURN TO LAND AND RISK (\$166.19)

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$206.68		
VARIABLE OPERATING EXPENSES	\$269.74			
RETURN OVER VARIABLE EXPENSES		(\$63.06)	(GROSS MARGIN)	
FIXED EXPENSES	\$48.82			
NET FARM INCOME		(\$111.88)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$34.64			
NET OPERATING PROFIT		(\$146.52)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$19.67			
RETURN TO LAND AND RISK		(\$166.19)		

TABLE 9. Oat hay, sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.
Planting dates: February 1 - February 28
Harvesting Dates: June 1 - June 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
OAT HAY	\$100.00	6.80 TONS (STACKED)	\$680.00
TOTAL			\$680.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.30	100 LBS	\$30.00		\$30.00
FERTILIZER (16-20-0)	\$0.14	150 LBS	\$21.00		\$21.00
PUMP WATER*		28 AC. IN.			
SUBTOTAL			\$51.00		\$51.00

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.50	\$6.50	\$3.84	\$10.27	\$24.12
DISC (2X)	145 HP	0.34 HR		\$2.48	\$4.61	\$2.38	\$6.42	\$15.89
DRILL	70 HP	0.21 HR		\$1.53	\$1.16	\$1.02	\$4.49	\$8.20
IRRIGATE (4X)		1.00 HR		\$6.70	\$69.91	\$11.00	\$25.89	\$113.49
SUBTOTAL		2.03 HR		\$14.22	\$82.18	\$18.24	\$47.07	\$161.71

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER	14 FT	0.16 HR		\$1.17	\$0.90	\$1.51	\$3.54	\$7.11
BALER	145 HP	0.25 HR		\$1.83	\$3.39	\$2.16	\$4.72	\$12.09
BALE WAGON	S. P.	0.20 HR		\$1.46	\$2.25	\$4.46	\$1.52	\$9.69
SUBTOTAL		0.61 HR		\$4.45	\$6.53	\$8.13	\$9.78	\$28.89

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.41 HR		\$2.99				\$2.99
EMPLOYEE BENEFITS			\$3.36				\$3.36
INSURANCE		\$0.37					\$0.37
LAND TAXES						\$1.75	\$1.75
SUPERVISION AND MANAGEMENT			\$49.42				\$49.42
OTHER EXPENSES		\$43.33					\$43.33
SUBTOTAL	0.41 HR	\$43.70	\$55.77			\$1.75	\$101.23

TOTAL OPERATING EXPENSES 3.05 HR \$94.70 \$74.45 \$88.71 \$26.37 \$58.60 \$342.83

NET OPERATING PROFIT \$337.17

INTEREST ON OPERATING CAPITAL (\$51.83 @ 8.00%) \$4.15
INTEREST ON EQUIPMENT INVESTMENT \$19.86

RETURN TO LAND AND RISK \$313.16

* Pump water costs are shown under irrigation in the preharvest operations section.
BUDGET SUMMARY

GROSS RETURN		\$680.00	
VARIABLE OPERATING EXPENSES	\$209.79		
RETURN OVER VARIABLE EXPENSES		\$470.21	(GROSS MARGIN)
FIXED EXPENSES	\$58.60		
NET FARM INCOME		\$411.61	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$74.45		
NET OPERATING PROFIT		\$337.17	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$24.01		
RETURN TO LAND AND RISK		\$313.16	

TABLE 10. Upland cotton (picker), sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD	BASE					TOTAL	
GROSS RETURNS									
COTTON LINT	\$0.55	980 LBS						\$539.00	
COTTON SEED	\$0.08	1,568 LBS						\$117.60	
DIRECT PAYMENT	\$0.0667	980 LBS	0.85					\$55.56	
COUNTER CYCLICAL PAYMENT	\$0.1373	700 LBS	0.85					\$81.69	
TOTAL								\$793.85	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
SEED	\$0.68	15 LBS	\$10.20						\$10.20
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80						\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25						\$5.25
HERBICIDE (CUSTOM)	\$47.77	1 X/ACRE	\$47.77						\$47.77
INSECTICIDE (CUSTOM)	\$36.97	3 X/ACRE	\$36.97						\$36.97
CROP INSURANCE			\$1.64						\$1.64
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$106.63						\$106.63
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.24	\$2.30	\$1.19	\$3.21	\$7.95	
PLOW	145 HP	0.48 HR		\$3.50	\$6.50	\$3.84	\$10.27	\$24.12	
DISC (2X)	145 HP	0.34 HR		\$2.48	\$4.61	\$2.38	\$6.42	\$15.89	
FLOAT	145 HP	0.16 HR		\$1.17	\$2.17	\$0.94	\$2.75	\$7.02	
PRE-IRRIGATE		0.25 HR		\$1.68	\$17.48	\$2.75	\$6.47	\$28.37	
CULTIVATOR	65 HP	0.21 HR		\$1.53	\$1.48	\$0.41	\$0.51	\$3.94	
PLANTER	70 HP	0.26 HR		\$1.90	\$1.44	\$1.87	\$6.21	\$11.42	
SLED	70 HP	0.15 HR		\$1.10	\$0.83	\$0.30	\$1.07	\$3.30	
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.60	\$4.44	\$1.24	\$1.53	\$11.81	
HAND HOE (CUSTOM)			\$20.00					\$20.00	
IRRIGATE (3X)		0.75 HR		\$5.03	\$52.43	\$8.25	\$19.42	\$85.12	
SUBTOTAL		3.40 HR	\$20.00	\$24.22	\$93.68	\$23.17	\$57.88	\$218.95	
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.40	\$6.71	\$31.83	\$123.21	\$167.16	
HAUL (2X)	65 HP	1.00 HR		\$7.30	\$7.05	\$1.34	\$7.35	\$23.04	
GIN COTTON (CUSTOM)			\$146.02					\$146.02	
SUBTOTAL		1.74 HR	\$146.02	\$12.70	\$13.76	\$33.17	\$130.56	\$336.22	
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14 HR		\$1.02	\$0.78	\$0.40	\$3.15	\$5.35	
SUBTOTAL		0.14 HR		\$1.02	\$0.78	\$0.40	\$3.15	\$5.35	
OVERHEAD EXPENSES									
DOWNTIME		1.03 HR		\$7.54				\$7.54	
EMPLOYEE BENEFITS				\$6.83				\$6.83	
INSURANCE			\$0.76					\$0.76	
LAND TAXES							\$1.75	\$1.75	
SUPERVISION AND MANAGEMENT				\$58.63				\$58.63	
OTHER EXPENSES			\$43.33					\$43.33	
SUBTOTAL		1.03 HR	\$44.09	\$73.00			\$1.75	\$118.84	
TOTAL OPERATING EXPENSES		6.31 HR	\$316.73	\$110.95	\$108.22	\$56.74	\$193.35	\$785.99	
NET OPERATING PROFIT								\$7.87	
INTEREST ON OPERATING CAPITAL		(\$86.73 @	8.00%)				\$6.94	
INTEREST ON EQUIPMENT INVESTMENT								\$115.34	
RETURN TO LAND AND RISK								(\$114.41)	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$793.85	
VARIABLE OPERATING EXPENSES	\$481.69		
RETURN OVER VARIABLE EXPENSES	\$312.16		(GROSS MARGIN)
FIXED EXPENSES	\$193.35		
NET FARM INCOME	\$118.82		(RETURN TO CAPITAL, LABOR, LAND & RISK)
aes	\$110.95		
NET OPERATING PROFIT	\$7.87		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$122.28		
RETURN TO LAND AND RISK		(\$114.41)	

TABLE 11. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2004.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD	BASE					TOTAL
GROSS RETURNS								
COTTON LINT	\$0.50	980 LBS						\$490.00
COTTON SEED	\$0.08	1,568 LBS						\$117.60
DIRECT PAYMENT	\$0.0667	980 LBS	0.85					\$55.56
COUNTER CYCLICAL PAYMENT	\$0.1373	700 LBS	0.85					\$81.69
TOTAL								\$744.85
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.68	20 LBS	\$13.60					\$13.60
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25
HERBICIDE (CUSTOM)	\$47.92	1 X/ACRE	\$47.92					\$47.92
INSECTICIDE (CUSTOM)	\$36.89	3 X/ACRE	\$36.89					\$36.89
CROP INSURANCE		FCIC	\$1.19					\$1.19
PUMP WATER*		28 AC. IN.						
SUBTOTAL			\$109.65					\$109.65
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.24	\$2.30	\$1.19	\$3.21	\$7.95
PLOW	145 HP	0.48 HR		\$3.50	\$6.50	\$3.84	\$10.27	\$24.12
DISC (2X)	145 HP	0.34 HR		\$2.48	\$4.61	\$2.38	\$6.42	\$15.89
FLOAT	145 HP	0.16 HR		\$1.17	\$2.17	\$0.94	\$2.75	\$7.02
PRE-IRRIGATE		0.25 HR		\$1.68	\$17.48	\$2.75	\$6.47	\$28.37
CULTIVATOR	65 HP	0.21 HR		\$1.53	\$1.48	\$0.41	\$0.51	\$3.94
PLANTER	70 HP	0.26 HR		\$1.90	\$1.44	\$1.87	\$6.21	\$11.42
SLED	70 HP	0.15 HR		\$1.10	\$0.83	\$0.30	\$1.07	\$3.30
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.60	\$4.44	\$1.24	\$1.53	\$11.81
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		0.75 HR		\$5.03	\$52.43	\$8.25	\$19.42	\$85.12
SUBTOTAL		3.40 HR	\$20.00	\$24.22	\$93.68	\$23.17	\$57.88	\$218.95
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.53	\$3.44	\$2.93	\$16.55	\$27.45
HAUL	65 HP	0.75 HR		\$5.48	\$5.29	\$1.00	\$5.51	\$17.28
GIN COTTON (CUSTOM)			\$188.85					\$188.85
SUBTOTAL		1.37 HR	\$188.85	\$10.00	\$8.72	\$3.93	\$22.07	\$233.57
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$0.78	\$0.40	\$3.15	\$4.89
SUBTOTAL		0.14 HR		\$0.56	\$0.78	\$0.40	\$3.15	\$4.89
OVERHEAD EXPENSES								
DOWNTIME		0.98 HR		\$7.14				\$7.14
EMPLOYEE BENEFITS				\$6.26				\$6.26
INSURANCE			\$0.70					\$0.70
LAND TAXES							\$1.75	\$1.75
SUPERVISION AND MANAGEMENT				\$54.77				\$54.77
OTHER EXPENSES			\$43.33					\$43.33
SUBTOTAL		0.98 HR	\$44.02	\$68.17			\$1.75	\$113.94
TOTAL OPERATING EXPENSES		5.89 HR	\$362.52	\$102.95	\$103.18	\$27.51	\$84.85	\$681.01
NET OPERATING PROFIT								\$63.85
INTEREST ON OPERATING CAPITAL		(\$85.39 @	8.00%)				\$6.83
INTEREST ON EQUIPMENT INVESTMENT								\$34.53
RETURN TO LAND AND RISK								\$22.49

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$744.85	
VARIABLE OPERATING EXPENSES	\$493.21		
RETURN OVER VARIABLE EXPENSES	\$251.64	(GROSS MARGIN)	
FIXED EXPENSES	\$84.85		
NET FARM INCOME	\$166.79	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$102.95		
NET OPERATING PROFIT	\$63.85	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$41.36		
RETURN TO LAND AND RISK	\$22.49		

TABLE 12. Summary of per acre costs and returns for a 500 acre farm with above average, Artesia-Lake Authur area, Projected 2004.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON
	TONS	TONS	CWT	TONS	LBS	LBS
PRIMARY YIELD	4.50	7.00	45.00	6.80	980.00	980.00
PRIMARY PRICE	\$120.00	\$140.00	\$3.50	\$100.00	\$0.55	\$0.50
GOVERNMENT PAYMENTS	\$0.00	\$0.00	\$9.18	\$0.00	\$137.25	\$137.25
SECOND INCOME	\$0.00	\$40.00	\$40.00	\$0.00	\$117.60	\$117.60
GROSS RETURN	\$540.00	\$1,020.00	\$206.68	\$680.00	\$793.85	\$744.85
CASH OPERATING EXPENSES						
SEED	\$56.00		\$27.50	\$30.00	\$10.20	\$13.60
FERTILIZER	\$34.00	\$38.00	\$43.50	\$21.00	\$4.80	\$4.80
CHEMICALS	\$31.77	\$115.37	\$20.01		\$89.99	\$90.06
CROP INSURANCE			\$5.88		\$1.64	\$1.19
OTHER PURCHASED INPUTS		\$80.74				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$45.10	\$28.74	\$12.27	\$18.81	\$38.31	\$33.27
FUEL-IRRIGATION	\$104.86	\$119.84	\$69.91	\$69.91	\$69.91	\$69.91
REPAIRS	\$53.57	\$58.64	\$18.24	\$26.37	\$56.74	\$27.51
CUSTOM CHARGES			\$28.81		\$166.02	\$208.85
LAND TAXES		\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
OTHER EXPENSES	\$0.81	\$43.98	\$43.61	\$43.70	\$44.09	\$44.02
TOTAL CASH EXPENSES	\$326.11	\$487.06	\$271.49	\$211.54	\$483.45	\$494.96
RETURN OVER CASH EXPENSES	\$213.89	\$532.94	(\$64.81)	\$468.46	\$310.41	\$249.89
FIXED EXPENSES	\$112.75	\$138.39	\$47.07	\$56.85	\$191.59	\$83.10
TOTAL EXPENSES	\$438.87	\$625.45	\$318.56	\$268.39	\$675.04	\$578.06
NET FARM INCOME	\$101.13	\$394.55	(\$111.88)	\$411.61	\$118.82	\$166.79
LABOR AND MANAGEMENT COSTS	\$96.99	\$117.67	\$34.64	\$74.45	\$110.95	\$102.95
NET OPERATING PROFIT	\$4.14	\$276.89	(\$146.52)	\$337.17	\$7.87	\$63.85
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$12.60	\$6.08	\$4.15	\$6.94	\$6.83
INTEREST ON EQUIPMENT INVESTMENT	\$47.02	\$28.37	\$13.59	\$19.86	\$115.34	\$34.53
TOTAL CAPITAL COSTS	\$47.02	\$40.96	\$19.67	\$24.01	\$122.28	\$41.36
RETURN TO LAND AND RISK	(\$42.88)	\$235.92	(\$166.19)	\$313.16	(\$114.41)	\$22.49

TABLE 13. Whole farm summary, Artesia-Lake Arthur area,
Projected 2004.

GROSS RETURNS		
ALFALFA HAY	342 ACRES	\$321,480
CROP		\$11,400
GRAZING		
BARLEY	8.5 ACRES	\$1,339
CROP		\$78
DIRECT PAYMENTS		\$0
COUNTER CYCLICAL PAYMENT		\$340
GRAZING		
OAT HAY	8 ACRES	\$5,440
CROP		
PICKER COTTON	82 ACRES	\$44,198
COTTON LINT		\$9,643
COTTON SEED		\$3,306
DIRECT PAYMENTS		\$6,699
COUNTER CYCLICAL PAYMENT		
STRIPPER COTTON	59.5 ACRES	\$29,155
COTTON LINT		\$6,997
COTTON SEED		\$3,306
DIRECT PAYMENTS		\$4,861
COUNTER CYCLICAL PAYMENT		
		\$448,242
GROSS RETURN		
CASH OPERATING EXPENSES		
SEED		\$5,311
FERTILIZER		\$13,985
CHEMICALS		\$47,599
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$23,010
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$16,137
FUEL-IRRIGATION		\$51,178
REPAIRS		\$26,421
CUSTOM CHARGES		\$26,285
LAND TAXES		\$777
OTHER EXPENSES		\$19,534
		\$230,387
TOTAL CASH EXPENSES		\$217,854
RETURN OVER CASH EXPENSES		\$64,934
FIXED EXPENSES		\$295,322
TOTAL EXPENSES		\$152,920
NET FARM INCOME		\$55,177
LABOR AND MANAGEMENT COSTS		\$97,743
NET OPERATING PROFIT		
CAPITAL COSTS		\$4,650
INTEREST ON OPERATING CAPITAL		\$22,551
INTEREST ON EQUIPMENT INVESTMENT		
		\$27,201
TOTAL CAPITAL COSTS		
RETURN TO LAND AND RISK		\$70,542

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$50,542	11.43%
\$2,500 /ACRE	\$20,542	6.09%
\$4,000 /ACRE	(\$9,458)	4.15%
\$5,500 /ACRE	(\$39,458)	3.15%

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)